The Children's Healthline



communicating today's environmental problems to protect our children's future





Your Child and the Sun -Is there such a thing as a safe tan?

Children of all races are subject to skin damage and other health problems as a result of overexposure to the sun. In respect to skin cancer, fair-skinned children, especially those with

blond or red hair and/or blue eyes are most at risk. While children with darker skin are far less likely to develop skin cancer, those cases are, on average, more severe as they often go undetected until later stages.

It is estimated that a person receives 80% of their lifetime sun exposure by the time they turn 18

Facts on the Sun

The sun emits ultraviolet (UV) rays, two types of which (UVA and UVB) reach the Earth's surface.

UV rays are strongest when the sun is closest - midday hours, especially during spring and summer. UV rays are almost as strong on a cloudy day.

The naturally-occurring ozone layer, high in the atmosphere, provides some protection from UV rays, but in recent years this layer has been shrinking, allowing more radiation to reach the Earth than any time in the recent past. Today's children are more at risk than we were!

Health Effects

While the following health problems are primarily found in adults, overexposure to the sun, *particularly during childhood*, is the major contributing factor:

Sunburn is the most obvious indication that your child has received too much sun, but damage is being done to the skin even without a burn. Severe sunburn during childhood is believed to be a major cause of melanoma, the most serious form of skin cancer.

Skin Cancer

Melanoma is one of the fastest growing types of cancer in the U.S., with the number of cases doubling in the last 20 years. Several thousand people die of the disease each year.

The American Association of Dermatologists predicts that one million people will be diagnosed with skin cancer this year and the odds of a person developing skin cancer during their lifetime are now up to one in five!

While less deadly, other types of skin cancer (basal cell and squamous cell carcinomas) affect a much greater number of Americans (see box). Chronic exposure to the sun is the main cause of basal and squamous cell carcinomas.

Other Skin Damage

Premature wrinkles, spots, leathery skin, and growths, including actinic keratoses, are some of the other skin problems caused by overexposure to the sun.

Cataracts

Cataracts (where vision becomes cloudy) and other eye damage are linked, in part, to UV radiation.

Immune Suppression

Both sunburns and chronic exposure to UV rays have been found to suppress the immune system, even in people with dark skin. The result is the body's reduced ability to fight disease and infections.

How can we protect our children?

Fortunately, there are some fairly easy precautions, outside of keeping your children indoors, that you can take to reduce their sun exposure.

Avoid the midday sun,

particularly those hours between 10 a m and 4 p m when UV rays are strongest. Plan outdoor activities for your children earlier or later in the day.

Wear sunglasses. Purchase sunglasses for your children that

Planning some family time at the beach?

Vacations are often times when rules are relaxed and outdoor play is at a maximum. Because UV radiation is intensified by reflective surfaces such as water and sand, don't let your guard down, remember to pack:

Beach umbrellas
Waterproof sunscreen and lip balm
Loose-fitting coverups and brimmed hats
Sunglasses

Even better, plan some other activities so that your children spend the midday hours out of the sun.

provide 99-100% UVB protection and get them to wear them on bright days. Such glasses will automatically provide protection from the weaker UVA radiation.

Wear protective clothing.

Hats with brims offer good sun protection. Keep in mind that ball caps leave necks and ears exposed. Loose-fitting long-sleeve shirts and pants that are made from a tightly woven fabric are best. A typical T Shirt blocks only about half the UV rays. For super sensitive children special clothing is available that blocks nearly all the UV radiation.

Use sunscreen that has a Sun Protection Factor (SPF) of at least 15. Apply liberally to your children 15-30 minutes before going outside and repeat the application every few hours, particularly if your children have been perspiring or swimming. Waterproof sunscreen is good but can be rubbed off. Take care to apply sunscreen to sensitive, overlooked areas such as eyelids, ears, nose, and under the chin. Don't forget to protect your child's lips; numerous lip balms are available with sun screening capabilities. Finally, with very young children, those under 6 months, it's best to keep them out of the sun entirely to protect their sensitive skin.

The long term effectiveness of sunscreen has not been proven. You shouldn't rely totally on sunscreen for your children's sun protection; it should be but one part of their sun protection program.

Teach your children at an early age about the dangers of sun exposure and precautions that should be taken so that they can enjoy outdoor activities without seriously harming their future health.

Tanning salons are no safer. Popular with some teenagers. The equipment utilizes the same UV rays.

Check the UV Index developed by EPA and the National Weather Service. This index, on a scale from 0 to 10, measures the risk of overexposure to the sun. Publicized in most weather reports (newspapers, TV and radio) during the warmer months, this forecast can help you plan your children's activities and determine the most prudent way for them to dress.

For more information on ...

EPA's **SunWise** Program: www.epa.gov/docs/ozone/uvindex/uvover.html

EPA's and NOAA's UV Index: www.noaa.gov/uvb/fctsh.html

Skin cancer: www.cancer.org/media/story/021998_2.html

Sunscreen: www.aad.org/_vti_bin/shtml....eases/sunscreen_effective.html/map

EPA R3 UV Radiation: Fran Dougherty (215) 814-2083

EPA R3 **Children's Environmental Health Program**: contact Gail Tindal at (215) 814-2069 or Dan Welker at (215) 814-2744.